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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/932,430	08/17/2001	Bing Chao	EKM-81895	3438

7590

10/16/2003

Sheppard, Mullin, Richter & Hampton LLP
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Los Angeles, CA 90071

EXAMINER

DUONG, THANH P

ART UNIT	PAPER NUMBER
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3711

DATE MAILED: 10/16/2003

15

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/932,430

Applicant(s)

CHAO ET AL.

Examiner

Tom P Duong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-21, 23 and 30-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-21, 23 and 30-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claims 18-21 and 30-38 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is no written description of "maximum thickness of between 1.1 and 1.8 mm".

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 18-21 and 30-38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase "maximum thickness of between 1.1 and 1.8 mm" is indefinite and inaccurate.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 13-14, 16-18, 23, and 30-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hocknell et al. (6,440,011) in view of Peterson (6,162,133).

Regarding claims 13-14, 16-18, 21, 23, 30-34, Hocknell discloses a golf club comprising: a body 44 having striking plate (central region 0.110-0.93 inch, periphery region 0.069-0.061 inch); a crown 62 (Col. 5, lines 15-22) having thickness range of 0.025-0.060 inch; face height of 48 mm; rear section 70 (best understood to be the skirt); and a sole 64 having thickness range of 0.025-0.060 inch; weight members 122 and 123; and a golf club volume ranging from 175-400 cc. Hocknell does not disclose the material properties of the striking face; however Hocknell discloses the face member 60 made of alpha-beta titanium and/or titanium alloy and Official Notice is taken that such material inherently has the same properties as the claimed invention since the materials are the same. With respect to the thickness of the striking plate and unitary head construction, Peterson teaches a striking plate with design thickness ranging from 1.5-3.0 mm and the thickness selection is depended on desire strength, configuration, and weight distribution. Peterson also teaches a unitary, one-piece body 32, which provides the advantage for its uniformed construction, weight distribution, and reduces

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manufacturing cost (Col. 4, lines 23-48). Thus, it would have been obvious in view of Peterson to one having ordinary skill in the art to provide a golf club head of Hocknell with a thin striking plate and a unitary head construction as taught by Peterson in order to gain the above advantages. With respect to the COR versus its loft angle for a given club head, a higher COR value inherently requires a design with decreased loft angle while a smaller COR value results in a design with increased loft angle. Regarding claim 14, it is well-known in the art to assemble club head by welding club parts together. Regarding claim 16, Official Notice is taken that it is known in the art to thickening the sole portion or add weights to the sole portion to lower the center of gravity and it is inherent to do so here to gain the same benefits. Claims 30-38 recite limitations similar to claims 13-14, 16-18, and 23; thus, claims 30-38 are rejected for the same reasons as applied in claims 13-4, 16-18, and 23, above.

4. Claims 15 and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over prior art as applied to claims 13 and 18 above, and further in view of Japanese Publication 2001-029518. Regarding claims 15 and 20, the prior art discloses the forging process but does not disclose expressly the method of cold forging or cold working process in forming the striking plate. JP '518 teaches 15% or more of the cold working process in club head and such metal forming process increased stress resistance and hardness. (Page 3, Section 0017-0018). Thus, it would have been obvious in view of JP '518 to one having ordinary skill in the art to fabricate the club head of the prior art using 15% or more of the cold working as taught by JP '518 to gain the above benefits. Regarding claim 19, JP '518 teaches the titanium alloy composition

of the claimed invention (Page 2, Section 0006). Regarding claim 21, the prior art discloses the central and periphery thickness of the striking plate.

Response to Arguments

Applicant's arguments with respect to claims 13-21 and 30-35 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom P Duong whose telephone number is (703) 305-4559. The examiner can normally be reached on 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Sewell can be reached on (703) 308-2126. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

Tom Duong


Paul Sewell
Supervisory Patent Examiner
(703) 308-2126